



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW6305G14831-3G

Job Sheet 172414



quill

Part No: RBW6305G14831-3G

Job Qty: 3 ea

Part Name: Tail Rotor Drive Quill Lip Seal Remover



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/16/18

Job Tracking No:

Due Date: 4/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6305G14831-3G REV 2 IPP REV A 18.02.15 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	3 pcs		4/16/18	0.00	0.00	Purchasing		4/18/18/01
110	Packaging	3 pcs		4/16/18	0.00	0.00	Packaging2		4/18/18/01
120	QC	3 pcs		4/16/18	0.00	0.00	QC6		33
130	Packaging	3 pcs		4/16/18	0.00	0.00	Packaging3		9-88
140	QC21-FG	3 Ea		4/16/18	0.00	0.00	QC21		MAY 02 2018 6A/123

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 035084 MANUFACTURE RBW6305G14831-3G AS PER
Descriptions: DWG -Certificate of conformity is required

FEB 22 2018
MAY 06 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6305G14831-3GP	Tail Rotor Drive Quill Lip Seal Remover	3 (1 ea)	100-Purchasing	5667422

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6305G14831-3GP	3	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

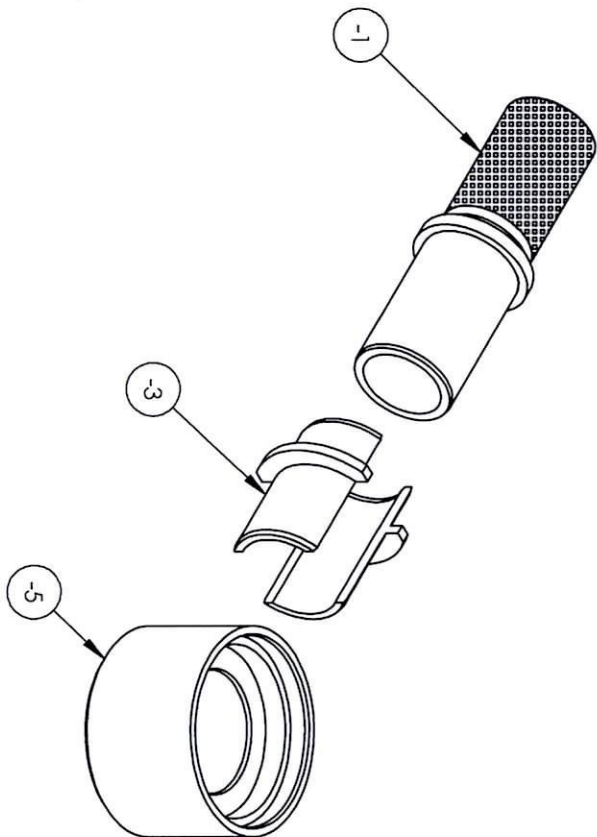
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																							
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																					
Description Work Order Deviation Job No: 172414 Mfg Date: 05/01/18 Packaging Operation: _____ Revision: _____ Serial No/Batch: S067423 PART NO: RBW6305G14831-3G Tail Rotor Drive Quill Lip Seal Remover Container No: S067423 Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: left; padding: 5px;">Root Cause</th> </tr> <tr> <td style="width:15%;">Environment</td> <td style="width:15%;">☐</td> <td style="width:15%;">No Re-verfi</td> <td style="width:15%;">☐</td> </tr> <tr> <td>Design</td> <td>☐</td> <td>Operator</td> <td>☐</td> </tr> <tr> <td>Doc/Data</td> <td>☐</td> <td>Offset/Setu</td> <td>☐</td> </tr> <tr> <td>Equip/Tooling</td> <td>☐</td> <td>Supplier</td> <td>☐</td> </tr> <tr> <td>Handling/Pre</td> <td>☐</td> <td>Training</td> <td>☐</td> </tr> <tr> <td>Material</td> <td>☐</td> <td>Use for Test</td> <td>☐</td> </tr> <tr> <td>Internal Transport</td> <td>☐</td> <td>Poor Information</td> <td>☐</td> </tr> <tr> <td>Tribal Knowledge</td> <td>☐</td> <td>Rushing</td> <td>☐</td> </tr> <tr> <td>LOA</td> <td>☐</td> <td>Product Improvement</td> <td>☐</td> </tr> <tr> <td>Substation</td> <td>☐</td> <td>Process Improvement</td> <td>☐</td> </tr> <tr> <td>Past Expiry Date</td> <td>☐</td> <td>Manufacturing Process</td> <td>☐</td> </tr> <tr> <td>Misidentified</td> <td>☐</td> <td>Past Due</td> <td>☐</td> </tr> </table>						Root Cause				Environment	☐	No Re-verfi	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setu	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Test	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐
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OTHER :																																																									

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
A		ADDED -1 MISSING R.10 (X2) PER G.E. ADDED -3 ENGRAVE NOTE PER R.W. CHD -5 ENGRAVE NOTES PER R.W.	5/6/2011	RJC
B		-3 ADDED MISSING HIDDEN LINES.	2/6/2013	RJC
C		CHD TOOL NAME WAS T/R DRIVE QULL LIP SEAL REMOVER IS TOOL. T/R DRIVE QULL LIP SEAL REMOVER TO MATCH PARTS MANUAL.	11/4/2013	RJC
1		-1 CHD SECTION A-A TO PARTIAL SECTION TO DIM KNUURL CHD DIM WAS $\varnothing 3.50$ IS 3.35. -3 CHD DIM WAS $\varnothing 3.500$ IS $\varnothing 3.500$. CHD TOLERANCE ON NON-CRITICAL PARTS.	5/13/2014	DPD
2	17-0105	UPDATED TO NEW STANDARD. -1 CHD DIMS WAS $\varnothing 3.450$ IS 3.540. WAS $\varnothing 2.125$ IS $\varnothing 2.13$. -3 CHD DIMS WAS $\varnothing 3.500$ IS $\varnothing 3.50$. WAS 2X 1.184 IS 1.184. WAS 2X .236 IS .236. WAS 2X 3.545 IX 3.545.	4/26/2017	DPD



- NOTE:
1. PART OF KIT RBW6305G01531-3G, BOX TWO RBW6305G19731-3G.
 2. REF. AGUSTA T/N: 3G6305G14831.

DART
AEROSPACE

TOOL, T/R DRIVE QULL
LIP SEAL REMOVER

RBW6305G14831-3G

REV 2

MATL. UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS $\pm 1/8$
DECIMALS $\pm .01$
ANGLES $\pm .5^\circ$
SURFACES = 125/
1. BREAK ALL SHARP EDGES
2. DIMENSIONAL LIMITS APPLY
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

DRAWN BY: CLOUGH
CHECKED: SM 05/03/2017
OPPS APPR: AA 05/05/2017
QA APPR: JL 05/10/2017
APPROVED: JAG 05/18/2017

USED ON MODEL: AW139

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	P.G.
			-1	1	HANDLE	6061		2
			-3	1	TWO HALF KEEPER	6061		3
			-5	1	BASE	6061		4

SCALE 1:4 DATE 2/4/2011 SHEET 1 OF 4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								



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PURCHASE ORDER PO039084

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				3G Rev. 1							
Line Item Note job# 172416											
15	RBW6305G14631-3GP			Tail Rotor Drive Quill Seal Housing Remover As Per Dwg RBW6305G14631-3G Rev. 1A	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$1,205.32/Ea	\$3,615.96
							✓ 3x			AT 18/04/25	
Line Item Note job# 172415											
16	RBW6305G14831-3GP			Tail Rotor Drive Quill Lip Seal Remover As Per Dwg RBW6305G14831-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$922.80/Ea	\$2,768.40
							✓ 3x			AT 18/05/16	
Line Item Note job# 172414											
17	RBW6305G16031-3GP			Drive Quill Seal Housing Remover As Per Dwg RBW6305G16031-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$981.65/Ea	\$2,944.95
							✓ 3x			AT 18/04/26	
Line Item Note job# 172413											
18	RBW6305G18331-3GP			Ecs Drill Quill Lip Seal Remover As Per Dwg RBW6305G18331-3G Rev. B	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$534.40/Ea	\$1,603.20
							✓ 3x			AT 18/04/25	
Line Item Note job# 172412											
19	RBW6305G18631-3GP			Ecs Drive Quill Housing Remover As Per Dwg RBW6305G18631-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$1,043.33/Ea	\$3,129.99
							✓ 3x			AT 18/04/26	
Line Item Note job# 172411											
20	RBW6305G19231-3GP			Puller Rotor Brake Adapter Flange Remover As Per Dwg RBW6305G19231-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$740.19/Ea	\$2,220.57
							✓ 3x			AT 18/04/26	
Line Item Note job# 172410											
21	RBW6305G19151-3GP			Guide Fan Drive Quill Seal Housing Installer As Per Dwg RBW6305G19151-3G Rev. B	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$132.32/Ea	\$396.96
							✓ 3x			AT 18/04/16	
Line Item Note job# 172402											
22	RBW6305G16231-3G-1P			Handle As Per Dwg RBW6305G16231-3G-1 Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$368.38/Ea	\$1,105.14
							✓ 3x			AT 18/04/16	

DAS
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9-89



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No:039084

Dated: 04/27/2018

Our Order / Job No: 16AWT

Order Qty: 3

Part Name: Tool, T/R Drive Quill Lip Seal Remover

Part Number: RBW6305G14831-3G

Lot Size:N/A

Ship Date: 04/28/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBW6305G14831-3G

Rev: 2

Material Size and Type: -1/6061 ALUM.; -3/6061 ALUM.; -5/6061 ALUM.

Material Specifications: ALUM. – ASTM B221

Heat Treatment: N/A

Plating/Finish: CLEAR ANODIZE: MIL-A-8625F, TYPE II, CLASS I

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date:

04/27/18

Signed:

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com

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MAY 02 2018